

# LINCOLN AIRPORT



F.A.R. Part 150 Noise Compatibility Study

Noise Compatibility Program

**LINCOLN AIRPORT**

**F.A.R. Part 150**

**Noise Compatibility Study**

**NOISE COMPATIBILITY PROGRAM**

**Prepared For**  
**The Lincoln Airport Authority**

**By**  
**Coffman Associates, Inc.**

**September 2003**

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## NOISE COMPATIBILITY PROGRAM

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# **NOISE COMPATIBILITY PROGRAM**

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*F.A.R. Part 150  
Noise Compatibility Study Update  
Lincoln Airport*

This is the Noise Compatibility Program (NCP) document prepared for Lincoln Airport. The NCP is the second of two parts required in a Federal Aviation Regulation (F.A.R.) Part 150 Noise Compatibility Study. It includes Chapters Four, Five, and Six in addition to four appendices. The first volume, the Noise Exposure Maps, which includes the first Three chapters of the study, was submitted to the FAA in February 2003.

Chapter Four of the NCP, Noise Abatement Alternatives, discusses and analyzes potential methods of reducing or shifting aircraft noise away from noise sensitive areas.

Chapter Five, Land Use Alternatives, analyzes potential land use planning and zoning techniques to prevent the

development of new noise-sensitive land uses in areas exposed to aircraft noise.

Chapter Six presents the Noise Compatibility Program. The program is organized into three elements: noise abatement, land use management, and program management. The first two elements are based on the findings of Chapters Four and Five. The program management element includes measures to administer, refine, and update the overall program as needed in the future.

Supplemental information is provided in the appendices and Technical Information Papers. Appendix A lists the members of the Planning Advisory Committee (PAC) who were consulted throughout the planning process. It also includes an explanation of the role of the PAC in the Part 150 update

process. Appendix B, Coordination, Consultation, and Public Involvement, summarizes the planning process, local coordination, and the public involvement process.

Appendix C contains a verbatim copy of the Integrated Noise Model output report. This appendix is contained within the Noise Exposure Maps (NEM) document.

Appendix D contains sample implementation materials for the various recommendations contained within the NCP.

Appendix E contains supporting information for land use regulations below the 65 DNL contour.

For the convenience of FAA reviewers, the FAA's official Noise Compatibility Checklist is presented on pages iii through viii.

**F.A.R. PART 150  
NOISE COMPATIBILITY PROGRAM CHECKLIST**

**AIRPORT NAME:** *Lincoln Airport  
Lincoln, Nebraska*

**REVIEWER:** \_\_\_\_\_

	Yes/No/NA	Page No./ Other Reference
<b>I. IDENTIFICATION AND SUBMISSION OF PROGRAM:</b> A. Submittal is properly identified: 1. F.A.R. 150 NCP? 2. NEM and NCP together? 3. Program revision? B. Airport and Airport Operator's name identified? C. NCP transmitted by airport operator cover letter?	Yes No No Yes Yes	Title Page; p. i Title Page; p. i
<b>II. CONSULTATION: [150.23]</b> A. Documentation includes narrative of public participation and consultation process?  B. Identification of consulted parties: 1. all parties in 150.23(c) consulted?  2. public and planning agencies identified?  3. agencies in 2, above, correspond to those indicated on the NEM?  C. Satisfies 150.23(d) requirements? 1. documentation shows active and direct participation of parties in B, above?  2. active and direct participation of general public?	Yes  Yes  Yes  Yes  Yes  Yes	Appendix B; supplemental volume titled "Supporting Information on Project Coordination and Local Consultation"  Appendix A; Appendix B; and supplemental volume titled "Supporting Information on Project Coordination and Local Consultation"  Appendix A; Appendix B; and supplemental volume titled "Supporting Information on Project Coordination and Local Consultation"  Appendix A; Appendix B; and supplemental volume titled "Supporting Information on Project Coordination and Local Consultation"  Appendix B; supplemental volume titled "Supporting Information on Project Coordination and Local Consultation"  Appendix A; Appendix B; supplemental volume titled "Supporting Information on Project Coordination and Local Consultation"

**F.A.R. PART 150  
NOISE COMPATIBILITY PROGRAM CHECKLIST**

**AIRPORT NAME:** *Lincoln Airport  
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	Yes/No/NA	Page No./ Other Reference
3. participation was prior to and during development of NCP and prior to submittal to FAA?	Yes	Appendix B; supplemental volume titled "Supporting Information on Project Coordination and Local Consultation"
4. indicates adequate opportunity afforded to submit views, data, etc.?	Yes	Appendix B; supplemental volume titled "Supporting Information on Project Coordination and Local Consultation"
D. Evidence included of notice and opportunity for a public hearing on NCP?	Yes	Appendix B; supplemental volume titled "Supporting Information on Project Coordination and Local Consultation"
E. Documentation of comments:		
1. includes summary of public hearing comments, if hearing was held?	Yes	Appendix B; supplemental volume titled "Supporting Information on Project Coordination and Local Consultation"
2. includes copy of all written material submitted to operator?	Yes	Supplemental volume titled "Supporting Information on Project Coordination and Local Consultation"
3. includes operator's responses/disposition of written and verbal comments?	Yes	Supplemental volume titled "Supporting Information on Project Coordination and Local Consultation"
F. Informal agreement received from FAA on flight procedures?	Yes	The local tower manager was involved in the Planning Advisory Committee (PAC) meetings and indicated agreement with flight procedures. FAA representative from Airports Division of the Central Region also attended PAC meetings.

**F.A.R. PART 150**  
**NOISE COMPATIBILITY PROGRAM CHECKLIST**

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	Yes/No/NA	Page No./ Other Reference
<p>III. <b>NOISE EXPOSURE MAPS: [150.23, B150.3, 150.35(f)]</b> (This section of the checklist is not a substitute for the Noise Exposure Map Checklist. It deals with maps in the context of the Noise Compatibility Program submission.)</p> <p>A. Inclusion of NEMs and supporting documentation:</p> <ol style="list-style-type: none"> <li>Map documentation either included or incorporated by reference?</li> <li>Maps previously found in compliance by FAA?</li> <li>Compliance determination still valid?</li> <li>Does 180-day period have to wait for map compliance finding?</li> </ol> <p>B. Revised NEMs submitted with program: (Review using NEM checklist if map revisions included in NCP submittal?)</p> <ol style="list-style-type: none"> <li>Revised NEMs included with program?</li> <li>Has airport operator requested FAA to make a determination on the NEM(s) when NCP approval is made?</li> </ol> <p>C. If program analysis uses noise modeling:</p> <ol style="list-style-type: none"> <li>INM, HNM, or FAA-approved equivalent?</li> <li>Monitoring in accordance with A150.5?</li> </ol> <p>D. Existing condition and 5-year maps clearly identified as the official NEMs?</p>	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>No</p> <p>No</p> <p>Yes</p> <p>No</p> <p>Yes</p>	<p>Noise Exposure Maps submitted in February 2003.</p>
<p>IV. <b>CONSIDERATION OF ALTERNATIVES: [B150.7, 150.23(e)]</b></p> <p>A. At a minimum, are the alternatives below considered?</p> <ol style="list-style-type: none"> <li>land acquisition and interests therein, including air rights, easements, and development rights?</li> <li>barriers, acoustical shielding, public building soundproofing?</li> <li>preferential runway system?</li> </ol>	<p>Yes</p> <p>Yes</p> <p>Yes</p>	<p>Chapter 5, pp. 5-21 - 5-23, 5-25 - 5-28</p> <p>Chapter 4, pp. 4-8 - 4-10, pp. 4-31 - 4-34, Table 4D, p. 4- 35</p> <p>Chapter 5, pp. 5-23 - 5-24</p> <p>Chapter 4, p. 4-3 - 4-4</p>

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	Yes/No/NA	Page No./ Other Reference
4. flight procedures?	Yes	Chapter 4, pp. 4-4 - 4-5, p. 4-6, pp. 4-28 - 4-31 Table 4D, pp. 4-35
5. restriction on type/class of aircraft (at least one restriction below must be checked)		
a. deny use based on Federal standards?	Yes	Chapter 4, pp. 4-15 - 4-19
b. capacity limits based on noisiness?	Yes	Chapter 4, p. 4-20
c. noise abatement takeoff/approach procedures?	Yes	Chapter 4, pp. 4-11 - 4-15
d. landing fees based on noise or time of day?	Yes	Chapter 4, pp. 4-20 - 4-22
e. nighttime restrictions?	Yes	Chapter 4, pp. 4-24 - 4-26
6. other actions with beneficial impact?	Yes	Chapter 4, pp. 4-20 - 4-26
7. other FAA recommendations?	N/A	
B. Responsible implementing authority identified for each considered alternative?	Yes	Chapter 5, Table 5B, p.5-29
C. Analysis of alternative measures:		
1. measures clearly described?	Yes	Chapter 4, pp. 4-3 - 4-35 Chapter 5, pp. 5-7 - 5-29
2. measures adequately analyzed?	Yes	Chapter 4, pp. 4-3 - 4-35 Chapter 5, pp. 5-7 - 5-29

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	Yes/No/NA	Page No./ Other Reference
3. adequate reasoning for rejecting alternatives?	Yes	Chapter 4, pp. 4-3 - 4-35 Chapter 5, pp. 5-7 - 5-29
D. Other actions recommended by the FAA: Should other actions be added? (list separately or on back of this form actions and discussions with airport operator to have them included prior to the start of the 180-day cycle)	N/A	
<b>V. ALTERNATIVES RECOMMENDED FOR IMPLEMENTATION: [150.23(e), B150.7(c); 150.35(b), B150.5]</b>		
A. Document clearly indicates:		
1. alternatives recommended for implementation?	Yes	Chapter 6, pp. 6-2 - 6-19, Table 6C, pp. 6-20 - 6-22
2. final recommendations are airport operators, not those of consultant or third party?	Yes	Sponsor's Certification, p. x
B. Do all program recommendations:		
1. relate directly or indirectly to reduction of noise and noncompatible land uses?	Yes	Chapter 6, pp. 6-2 - 6-19
2. contain description of contribution to overall effectiveness of program?	Yes	Chapter 6, pp. 6-2 - 6-19
3. noise/land use benefits quantified to extent possible?	Yes	Chapter 6, pp. 6-2 - 6-19
4. include actual/anticipated effect on reducing noise exposure within noncompatible area shown on NEM?	Yes	Chapter 6, pp. 6-2 - 6-19
5. effects based on relevant and reasonable expressed assumptions?	Yes	Chapter 4, Chapters 5 & 6
6. have adequate supporting data to support its contribution to noise/land use compatibility?	Yes	Chapter 4, Chapters 5 & 6
C. Analysis appears to support program standards set forth in 150.35 (b) and B150.5?	Yes	Chapter 4, Chapters 5 & 6

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	Yes/No/NA	Page No./ Other Reference
D. When use restrictions are recommended:		
1. are alternatives with potentially significant noise/compatible land use benefits thoroughly analyzed so that appropriate comparisons and conclusions can be made?	N/A	No use restrictions recommended.
2. use restrictions coordinated with APP-600 prior to making determination on start of 180-days?	N/A	
E. Do the following also meet Part 150 analytical standards:		
1. formal recommendations which continue existing practices?	N/A	
2. new recommendations or changes proposed at end of Part 150 process?	N/A	
F. Documentation indicates how recommendations may change previously adopted plans?	N/A	
G. Documentation also:		
1. identifies agencies which are responsible for implementing each recommendation?	Yes	Chapter 6, pp. 6-2 - 6-19, Table 6C, pp.6-20 - 6-22
2. indicates whether those agencies have agree to implement?	Yes	Sponsor's Certification on p. x. By approving NCP, Airport Authority has agreed to seriously consider implementation of the measures for which it has sole responsibility, provided that funding is available. It has also agreed to encourage other organizations and agencies to take any recommended actions per NCP.
3. indicates essential government actions necessary to implement recommendations?	Yes	Chapter 6, pp. 6-2 - 6-19, Table 6C, pp.6-20 - 6-22
H. Timeframe:		
1. includes agreed-upon schedule to implement alternatives?	Yes	Chapter 6, pp. 6-2 - 6-19, Table 6C, pp.6-20 - 6-22



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		Yes/No/NA	Page No./ Other Reference
2.	indicates period covered by the program?	Yes	Chapter 6, pp. 6-2 - 6-19, Table 6C, pp.6-20 - 6-22
I.	Funding/Costs:		
1.	includes costs to implement alternatives?	Yes	Chapter 6, pp. 6-2 - 6-19, Table 6C, pp.6-20 - 6-22
2.	includes anticipated funding sources?	Yes	Chapter 6, pp. 6-2 - 6-19, Table 6C, pp.6-20 - 6-22
VI.	<b>PROGRAM REVISION [150.23(e)(9)] Supporting documentation includes provision for revision?</b>	Yes	Chapter 6, pp. 6-16 -6-18

## **SPONSOR'S CERTIFICATION**

The Noise Compatibility Program and accompanying documentation for Lincoln Airport, including the description of consultation and opportunity for public involvement, submitted in accordance with F.A.R. Part 150, and hereby certified as true and complete to the best of my knowledge and belief. It is hereby certified that adequate opportunity has been afforded interested persons to submit views, data, and comments on the Noise Compatibility Program.

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Date of Signature

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John Wood, Executive Director  
Lincoln Airport Authority